GenCore version 4.5

OM protein - protein search, using sw model

Run on: March 1, 2001, 15:47:15 ; Search time 210.42 Seconds
(without alignments)
6.988 Million cell updates/sec

Title: US-09-331-631A-5_COPY_33_75
Perfect score: 248
Sequence: 1 NQEDPQTECQQCQRRCRQQE.....RQQQYCQRRCKEICEEEEEY 43

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 268485 seqs, 34193795 residues

Total number of hits satisfying chosen parameters: 268485

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_36:*
1: /SIDS1/gcgdata/geneseq/geneseqp/AA1980.DAT:*
2: /SIDS1/gcgdata/geneseq/geneseqp/AA1981.DAT:*
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11: /SIDS1/gcgdata/geneseq/geneseqp/AA1990.DAT:*
12: /SIDS1/gcgdata/geneseq/geneseqp/AA1991.DAT:*
13: /SIDS1/gcgdata/geneseq/geneseqp/AA1992.DAT:*
14: /SIDS1/gcgdata/geneseq/geneseqp/AA1993.DAT:*
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20: /SIDS1/gcgdata/geneseq/geneseqp/AA1999.DAT:*
21: /SIDS1/gcgdata/geneseq/geneseqp/AA2000.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	248	100.0	625	19	W62830	Macadamia integrif
2	241	97.2	666	19	W62828	Macadamia integrif
3	235	94.8	666	19	W62829	Macadamia integrif
4	110	44.4	525	19	W62831	Theobroma cacao an
5	110	44.4	566	13	R20181	Sequence encoded b
6	109	44.0	590	19	W62832	Gossypium hirsutum
7	96	38.7	28	19	W62841	Stenocarpus sinuat
8	68.5	27.6	593	19	W62835	Zea mays antimicro
9	66.5	26.8	35	13	R21079	Antimicrobial maiz
10	66.5	26.8	637	19	W62837	Hordeum vulgare an
11	65.5	26.4	33	19	W62836	Zea mays antimicro
12	65	26.2	910	20	Y22191	Mouse brain CNG-1
13	65	26.2	919	10	P93109	Human androgen rec
14	65	26.2	919	18	W14783	Androgen receptor.
15	65	26.2	919	21	Y78914	Human androgen rec
16	63.5	25.6	51	18	W33694	Mouse protamine 1.
17	63.5	25.6	176	18	W33695	Mouse protamine 1
18	63.5	25.6	301	19	W37085	Anti-human SC sing
19	63.5	25.6	409	20	W90342	G. max truncated S
20	63.5	25.6	489	20	W90341	G. max SBP2 protei
21	63	25.4	626	18	W22150	Peanut allergen Ar
22	63	25.4	626	20	Y15244	Peanut allergen, A
23	63	25.4	626	20	Y25657	Peanut allergen 11
24	62	25.0	1162	21	Y58500	HHV8 ORF 73 protei
25	61.5	24.8	98	21	Y65429	Human 5' EST relat
26	61.5	24.8	215	14	R44806	Human cyclin D3 ps
27	61	24.6	1447	20	W81029	Murine pCIP protei
28	60	24.2	154	20	Y33504	Human unliganded a
29	60	24.2	918	12	R12223	Human androgen rec
30	60	24.2	918	20	Y33491	Human androgen rec
31	59.5	24.0	614	18	W22149	Peanut allergen Ar
32	59.5	24.0	614	19	W62834	Arachis hypogaea a
33	59	23.8	2023	21	Y54320	Amino acid sequenc
34	58.5	23.6	461	15	R51002	Sequence of human
35	58.5	23.6	514	19	W80400	A secreted protein
36	58	23.4	151	21	Y74634	Neisseria meningit
37	58	23.4	199	21	Y74635	Neisseria meningit
38	57.5	23.2	304	13	R20063	Human EDF-binding
39	57.5	23.2	317	10	P93396	Human follistatin
40	57.5	23.2	605	19	W62838	Glycine max antimi
41	57.5	23.2	809	20	Y29672	Human cerebral pro
42	57	23.0	303	15	R60054	Dirofilaria immiti
43	57	23.0	1898	20	Y30795	A human trichohyal
44	57	23.0	2074	21	Y54319	Amino acid sequenc
45	56.5	22.8	281	21	Y91958	Human cytoskeleton

ALIGNMENTS

RESULT 1
W62830
ID W62830 standard; Protein; 625 AA.
XX
AC W62830;
XX
DT 27-OCT-1998 (first entry)
XX
DE Macadamia integrifolia antimicrobial protein.
XX
KW antimicrobial protein; infestation; control.
XX
OS Macadamia integrifolia.
XX
FH Key Location/Qualifiers
FT Peptide 1..28
FT /note= "signal peptide"
FT Protein 29..666
FT /note= "mature protein"
XX
PN WO9827805-A1.
XX
PD 02-JUL-1998.
XX
PF 22-DEC-1997; 97WO-AU00874.
XX
PR 20-DEC-1996; 96AU-0004275.
XX
PA (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
XX
PI Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;
XX
DR WPI; 1998-377279/32.
DR N-PSDB; V42316.
XX

```
PT   Novel anti-microbial protein from e.g. Macadamia integrifolia -
PT   useful for controlling microbial infestations of plants or mammals
XX
PS   Claim 1; Page 43-45; 96pp; English.
XX
CC   The sequence is that of an antimicrobial protein which can
CC   be used to control microbial infestations in plants and mammalian
CC   animals.
XX
SQ   Sequence   625 AA;


  Query Match             100.0%;  Score 248;  DB 19;  Length 625;
  Best Local Similarity   100.0%;  Pred. No. 1.3e-19;
  Matches   43;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      1 NQEDPQTECQQCQRRCRQQESDPRQQQYCQRRCKEICEEEEEY 43
          |||||||||||||||||||||||||||||||||||||||||||
Db     33 nqedpqtecqqcqrrcrqqesdprqqqycqrrckeiceeeeey 75


RESULT   2
W62828
ID   W62828 standard; Protein; 666 AA.
XX
AC   W62828;
XX
DT   27-OCT-1998  (first entry)
XX
DE   Macadamia integrifolia antimicrobial protein.
XX
KW   antimicrobial protein; infestation; control.
XX
OS   Macadamia integrifolia.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1..28
FT                   /note= "signal peptide"
FT   Protein         29..666
FT                   /note= "mature protein"
XX
PN   WO9827805-A1.
XX
PD   02-JUL-1998.
XX
PF   22-DEC-1997;   97WO-AU00874.
XX
PR   20-DEC-1996;   96AU-0004275.
XX
PA   (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
XX
PI   Bower NI,  Goulter KC,  Green JL,  Manners JM,  Marcus JP;
XX
DR   WPI; 1998-377279/32.
DR   N-PSDB; V42310.
XX
PT   Novel anti-microbial protein from e.g. Macadamia integrifolia -
PT   useful for controlling microbial infestations of plants or mammals
XX
PS   Claim 1; Page 34-36; 96pp; English.
XX
CC   The sequence is that of an antimicrobial protein which can
CC   be used to control microbial infestations in plants and mammalian
CC   animals.
XX
SQ   Sequence   666 AA;


  Query Match             97.2%;  Score 241;  DB 19;  Length 666;
  Best Local Similarity   97.7%;  Pred. No. 7.8e-19;
  Matches   42;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy      1 NQEDPQTECQQCQRRCRQQESDPRQQQYCQRRCKEICEEEEEY 43
          |||||||||||||||||||||| ||||||||||||||||||||
Db     74 nqedpqtecqqcqrrcrqqesgprqqqycqrrckeiceeeeey 116


RESULT   3
W62829
ID   W62829 standard; Protein; 666 AA.
XX
AC   W62829;
XX
DT   27-OCT-1998  (first entry)
XX
DE   Macadamia integrifolia antimicrobial protein.
XX
KW   antimicrobial protein; infestation; control.
XX
OS   Macadamia integrifolia.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1..28
FT                   /note= "signal peptide"
FT   Protein         29..666
FT                   /note= "mature protein"
XX
PN   WO9827805-A1.
XX
PD   02-JUL-1998.
XX
PF   22-DEC-1997;   97WO-AU00874.
XX
PR   20-DEC-1996;   96AU-0004275.
XX
PA   (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
XX
PI   Bower NI,  Goulter KC,  Green JL,  Manners JM,  Marcus JP;
XX
DR   WPI; 1998-377279/32.
DR   N-PSDB; V42311.
XX
PT   Novel anti-microbial protein from e.g. Macadamia integrifolia -
PT   useful for controlling microbial infestations of plants or mammals
XX
PS   Claim 1; Page 39-41; 96pp; English.
XX
CC   The sequence is that of an antimicrobial protein which can
CC   be used to control microbial infestations in plants and mammalian
CC   animals.
XX
SQ   Sequence   666 AA;


  Query Match             94.8%;  Score 235;  DB 19;  Length 666;
  Best Local Similarity   93.0%;  Pred. No. 3.5e-18;
  Matches   40;  Conservative    2;  Mismatches    1;  Indels    0;  Gaps    0;

Qy      1 NQEDPQTECQQCQRRCRQQESDPRQQQYCQRRCKEICEEEEEY 43
          ||:||||:|||||||||||||| ||||||||||||||||||||
Db     74 nqddpqtdcqqcqrrcrqqesgprqqqycqrrckeiceeeeey 116


RESULT   4
W62831
ID   W62831 standard; Protein; 525 AA.
XX
AC   W62831;
XX
DT   27-OCT-1998  (first entry)
XX
DE   Theobroma cacao antimicrobial protein.
XX
KW   antimicrobial protein; infestation; control.
XX
OS   Theobroma cacao.
```

XX
PN WO9827805-A1.
XX
PD 02-JUL-1998.
XX
PF 22-DEC-1997; 97WO-AU00874.
XX
PR 20-DEC-1996; 96AU-0004275.
XX
PA (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
XX
PI Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;
XX
DR WPI; 1998-377279/32.
XX
PT Novel anti-microbial protein from e.g. Macadamia integrifolia -
PT useful for controlling microbial infestations of plants or mammals
XX
PS Claim 1; Page 47-49; 96pp; English.
XX
CC The sequence is that of an antimicrobial protein which can
CC be used to control microbial infestations in plants and mammalian
CC animals.
XX
SQ Sequence 525 AA;

Query Match 44.4%; Score 110; DB 19; Length 525;
Best Local Similarity 47.5%; Pred. No. 9.8e-05;
Matches 19; Conservative 10; Mismatches 11; Indels 0; Gaps 0;

Qy 2 QEDPQTECQQCQRRCRQQESDPRQQQYCQRRCKEICEEEE 41
:|: | : |||| ||::|: |:|| |||:| | :|:|
Db 78 eeelqrqyqqcqgrcqeqqqgqreqqqcqrkcweqykeqe 117

RESULT 5
R20181
ID R20181 standard; Protein; 566 AA.
XX
AC R20181;
XX
DT 16-APR-1992 (first entry)
XX
DE Sequence encoded by 67 kD T. cacao protein cDNA.
XX
KW Cocoa; flavour; vicilin; seed storage protein.
XX
OS Theobroma cacao.
XX
PN WO9119801-A.
XX
PD 26-DEC-1991.
XX
PF 07-JUN-1991; 91WO-GB00914.
XX
PR 11-JUN-1990; 90GB-0013016.
XX
PA (MRSC) MARS UK LTD.
XX
PI Spencer ME, Hodge R, Deakin EA, Ashton S;
XX
DR WPI; 1992-024418/03.
DR N-PSDB; Q20377.
XX
PT Recombinant cocoa proteins - are responsible for flavour in cocoa
PT beans and produced in large quantities using yeast and bacterial
PT expression vectors
XX
PS Claim 4; Fig 2; 59pp; English.
XX
CC The inventors claim a 67 kD and 31 kD T. cacao protein, and
CC fragments, and encoding DNAs. The 47 kD and 31 kD proteins are
CC derived from the 67 kD precursor. T. cacao protein cDNA was
CC detected in a cDNA library prepared from immature cocoa beans RNA
CC using a probe based on the AA sequence of a CNBr peptide common to
CC the 47 kD and 31 kD polypeptides. Homology searches revealed close
CC homologies between the 67 kD polypeptide and the vicilins, which are
CC seed storage proteins.
XX
SQ Sequence 566 AA;

Query Match 44.4%; Score 110; DB 13; Length 566;
Best Local Similarity 47.5%; Pred. No. 0.0001;
Matches 19; Conservative 10; Mismatches 11; Indels 0; Gaps 0;

Qy 2 QEDPQTECQQCQRRCRQQESDPRQQQYCQRRCKEICEEEE 41
:|: | : |||| ||::|: |:|| |||:| | :|:|
Db 78 eeelqrqyqqcqgrcqeqqqgqreqqqcqrkcweqykeqe 117

RESULT 6
W62832
ID W62832 standard; Protein; 590 AA.
XX
AC W62832;
XX
DT 27-OCT-1998 (first entry)
XX
DE Gossypium hirsutum antimicrobial protein.
XX
KW antimicrobial protein; infestation; control.
XX
OS Gossypium hirsutum.
XX
PN WO9827805-A1.
XX
PD 02-JUL-1998.
XX
PF 22-DEC-1997; 97WO-AU00874.
XX
PR 20-DEC-1996; 96AU-0004275.
XX
PA (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
XX
PI Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;
XX
DR WPI; 1998-377279/32.
XX
PT Novel anti-microbial protein from e.g. Macadamia integrifolia -
PT useful for controlling microbial infestations of plants or mammals
XX
PS Claim 1; Page 49-51; 96pp; English.
XX
CC The sequence is that of an antimicrobial protein which can
CC be used to control microbial infestations in plants and mammalian
CC animals.
XX
SQ Sequence 590 AA;

Query Match 44.0%; Score 109; DB 19; Length 590;
Best Local Similarity 50.0%; Pred. No. 0.00014;
Matches 20; Conservative 8; Mismatches 10; Indels 2; Gaps 1;

Qy 3 EDPQTECQQCQRRCRQQESDPRQQQYCQRRCKEICEEEEE 42
|||| ::||: ||||| ||| ||:|| : |:|::
Db 81 edpqrryeecqqecrqqee--rqqpqcqqrclkrfeqeqq 118

RESULT 7
W62841
ID W62841 standard; Protein; 28 AA.
XX
AC W62841;

```
XX
DT   27-OCT-1998  (first entry)
XX
DE   Stenocarpus sinuatus antimicrobial protein.
XX
KW   antimicrobial protein; infestation; control.
XX
OS   Stenocarpus sinuatus.
XX
PN   WO9827805-A1.
XX
PD   02-JUL-1998.
XX
PF   22-DEC-1997;   97WO-AU00874.
XX
PR   20-DEC-1996;   96AU-0004275.
XX
PA   (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
XX
PI   Bower NI,  Goulter KC,  Green JL,  Manners JM,  Marcus JP;
XX
DR   WPI; 1998-377279/32.
XX
PT   Novel anti-microbial protein from e.g. Macadamia integrifolia -
PT   useful for controlling microbial infestations of plants or mammals
XX
PS   Claim 1; Page 66; 96pp; English.
XX
CC   The sequence is that of an antimicrobial protein which can
CC   be used to control microbial infestations in plants and mammalian
CC   animals.
XX
SQ   Sequence   28 AA;


  Query Match             38.7%;  Score 96;  DB 19;  Length 28;
  Best Local Similarity   63.0%;  Pred. No. 0.00021;
  Matches   17;  Conservative    3;  Mismatches    7;  Indels    0;  Gaps    0;

Qy       4 DPQTECQQCQRRCRQQESDPRQQQYCQ 30
           ||  : | || ||:||| |||||| |:
Db       2 dpirqqqlcqmrcqqqekdprqqqqck 28


RESULT   8
W62835
ID   W62835 standard; Protein; 593 AA.
XX
AC   W62835;
XX
DT   27-OCT-1998  (first entry)
XX
DE   Zea mays antimicrobial protein.
XX
KW   antimicrobial protein; infestation; control.
XX
OS   Zea mays.
XX
PN   WO9827805-A1.
XX
PD   02-JUL-1998.
XX
PF   22-DEC-1997;   97WO-AU00874.
XX
PR   20-DEC-1996;   96AU-0004275.
XX
PA   (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
XX
PI   Bower NI,  Goulter KC,  Green JL,  Manners JM,  Marcus JP;
XX
DR   WPI; 1998-377279/32.
XX
PT   Novel anti-microbial protein from e.g. Macadamia integrifolia -
PT   useful for controlling microbial infestations of plants or mammals
XX
PS   Claim 1; Page 58-60; 96pp; English.
XX
CC   The sequence is that of an antimicrobial protein which can
CC   be used to control microbial infestations in plants and mammalian
CC   animals.
XX
SQ   Sequence   593 AA;


  Query Match             27.6%;  Score 68.5;  DB 19;  Length 593;
  Best Local Similarity   35.3%;  Pred. No. 3.4;
  Matches   12;  Conservative    10;  Mismatches    11;  Indels    1;  Gaps    1;

Qy       2 QEDPQTECQQCQRRC-RQQESDPRQQQYCQRRCK 34
           :|: ::   :|:|:| |: |  | : | | |||:
Db     557 eeeersgrgecrrqclrrheggpwetqecmrrcr 590


RESULT   9
R21079
ID   R21079 standard; Peptide; 35 AA.
XX
AC   R21079;
XX
DT   09-APR-1992  (first entry)
XX
DE   Antimicrobial maize peptide, CMIII.
XX
KW   Maize; CMIII; corn; pathogen.
XX
OS   Zea mays.
XX
PN   EP465009-A.
XX
PD   08-JAN-1992.
XX
PF   05-JUN-1991;   91EP-0305064.
XX
PR   05-JUN-1990;   90US-0536127.
XX
PA   (PION-) PIONEER HI-BRED INT.
XX
PI   Duvick JP,  Rood TA,  Rao AG;
XX
DR   WPI; 1992-010214/02.
XX
PT   Use of maize seed peptide CMIII and DNA encoding it - for killing
PT   or inhibiting plant pathogenic microorganisms.
XX
PS   Example 2; Page 5; 21pp; English.
XX
CC   The peptide (SEQ ID NO 1) was purified from public corn variety B73
CC   and propriety corn variety MH18.  It is basic and has has a total
CC   mol. wt. of 3900 daltons.  The peptide sequence was used to design
CC   probes which were used to screen a maize genomic or cDNA library.
CC   The isolated CMIII gene can be used to prepare an expression vector
CC   for prodn. of recombinant CMIII for use in controlling plant patho-
CC   genic organisms.
CC   See also Q20272 and 3.
XX
SQ   Sequence   35 AA;


  Query Match             26.8%;  Score 66.5;  DB 13;  Length 35;
  Best Local Similarity   44.0%;  Pred. No. 0.4;
  Matches   11;  Conservative    6;  Mismatches    7;  Indels    1;  Gaps    1;

Qy      11 QCQRRC-RQQESDPRQQQYCQRRCK 34
           :|:|:| |: |  | : | | |||:
Db       6 ecrrqclrrheggpyetqecmrrcr 30
```

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RESULT  10
W62837
ID   W62837 standard; Protein; 637 AA.
XX
AC   W62837;
XX
DT   27-OCT-1998  (first entry)
XX
DE   Hordeum vulgare antimicrobial protein.
XX
KW   antimicrobial protein; infestation; control.
XX
OS   Hordeum vulgare.
XX
PN   WO9827805-A1.
XX
PD   02-JUL-1998.
XX
PF   22-DEC-1997;   97WO-AU00874.
XX
PR   20-DEC-1996;   96AU-0004275.
XX
PA   (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
XX
PI   Bower NI,  Goulter KC,  Green JL,  Manners JM,  Marcus JP;
XX
DR   WPI; 1998-377279/32.
XX
PT   Novel anti-microbial protein from e.g. Macadamia integrifolia -
PT   useful for controlling microbial infestations of plants or mammals
XX
PS   Claim 1; Page 60-62; 96pp; English.
XX
CC   The sequence is that of an antimicrobial protein which can
CC   be used to control microbial infestations in plants and mammalian
CC   animals.
XX
SQ   Sequence   637 AA;


  Query Match             26.8%;  Score 66.5;  DB 19;  Length 637;
  Best Local Similarity   39.4%;  Pred. No. 6.1;
  Matches   13;  Conservative    7;  Mismatches    8;  Indels    5;  Gaps    2;

Qy      10 QQCQRRCRQQESDPRQQQYCQRRCKEICEEEEE 42
           ||| :||||:   ||   |   || : | ::::
Db      42 qqcvqrcrqer--pr---ysharcvqecrddqq 69


RESULT  11
W62836
ID   W62836 standard; Protein; 33 AA.
XX
AC   W62836;
XX
DT   27-OCT-1998  (first entry)
XX
DE   Zea mays antimicrobial protein.
XX
KW   antimicrobial protein; infestation; control.
XX
OS   Zea mays.
XX
PN   WO9827805-A1.
XX
PD   02-JUL-1998.
XX
PF   22-DEC-1997;   97WO-AU00874.
XX
PR   20-DEC-1996;   96AU-0004275.
XX
PA   (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
XX
PI   Bower NI,  Goulter KC,  Green JL,  Manners JM,  Marcus JP;
XX
DR   WPI; 1998-377279/32.
XX
PT   Novel anti-microbial protein from e.g. Macadamia integrifolia -
PT   useful for controlling microbial infestations of plants or mammals
XX
PS   Disclosure; Page 60; 96pp; English.
XX
CC   The sequence is that of an antimicrobial protein which can
CC   be used to control microbial infestations in plants and mammalian
CC   animals.
XX
SQ   Sequence   33 AA;


  Query Match             26.4%;  Score 65.5;  DB 19;  Length 33;
  Best Local Similarity   44.0%;  Pred. No. 0.49;
  Matches   11;  Conservative    6;  Mismatches    7;  Indels    1;  Gaps    1;

Qy      11 QCQRRC-RQQESDPRQQQYCQRRCK 34
           :|:|:| |: |  | : | | |||:
Db       6 ecrrqclrrhegqpwetqecmrrcr 30


RESULT  12
Y22191
ID   Y22191 standard; Protein; 910 AA.
XX
AC   Y22191;
XX
DT   10-SEP-1999  (first entry)
XX
DE   Mouse brain CNG-1 protein sequence.
XX
KW   BCNG; brain cyclic nucleotide gated ion channel; epilepsy; hyperalgesia;
KW   Alzheimer's Disease; Parkinson's Disease; long QT syndrome; dyslexia;
KW   sick sinus syndrome; age-related memory loss; cystic fibrosis;
KW   sudden death syndrome; pacemaker rhythm dysfunction; sensory disorder;
KW   auditory disorder; respiratory disorder; attention deficit disorder;
KW   learning disability; drug addiction; therapy; mBCNG-1.
XX
OS   Mus sp.
XX
PN   WO9932615-A1.
XX
PD   01-JUL-1999.
XX
PF   23-DEC-1998;   98WO-US27630.
XX
PR   28-MAY-1998;   98US-0086436.
PR   23-DEC-1997;   97US-0997685.
XX
PA   (UYCO ) UNIV COLUMBIA NEW YORK.
XX
PI   Bartsch D,  Grant S,  Kandel ER,  Santoro B,  Siegelbaum S;
PI   Tibbs G;
XX
DR   WPI; 1999-418922/35.
DR   N-PSDB; X84442.
XX
PT   An isolated nucleic acid encoding a brain or heart cyclic
PT   nucleotide-gated ion channel
XX
PS   Claim 16; Page 185-188; 213pp; English.
XX
CC   This sequence is the brain cyclic nucleotide-gated ion channel
CC   (BCNG) of the invention, designated mBCNG-1. BCNG and BCNG-related
CC   proteins are useful in screening for compounds that modulate, interact or
CC   affect expression. Compounds, e.g. antagonists and agonists, identified
CC   in the methods are useful for modulating BCNG or BCNG-related protein
CC   activity. Modulation is increased or decreased ion permissivity or ion
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CC   flow rate. Modulators of BCNG can be used to treat a neurological, renal,
CC   pulmonary, hepatic or cardiovascular condition. Such conditions include
CC   epilepsy, Alzheimer's Disease, Parkinson's Disease, long QT syndrome,
CC   sick sinus syndrome, age-related memory loss, cystic fibrosis, sudden
CC   death syndrome or pacemaker rhythm dysfunction. BCNG or BCNG-related
CC   protein can also be used to treat sensory disorders, e.g. blindness, loss
CC   of vision, loss of smell, numbness and lack of ability to taste. Also
CC   treatable are auditory disorders, respiratory disorders due to defects in
CC   central nervous system areas that control respiration or defects in the
CC   lungs, dyslexia, attention deficit disorder or learning disabilities,
CC   drug addiction and regulation of cell secretions. The proteins are useful
CC   targets for screening for drugs that are effective in the control of pain
CC   and hyperalgesia.
XX
SQ   Sequence   910 AA;

  Query Match            26.2%;  Score 65;  DB 20;  Length 910;
  Best Local Similarity  29.3%;  Pred. No. 12;
  Matches   12;  Conservative   16;  Mismatches   13;  Indels    0;  Gaps    0;

Qy       2 QEDPQTECQQCQRRCRQQESDPRQQQYCQRRCKEICEEEEE 42
           |: ||:: || | : :||:   :|||  |:: ::  ::::: 
Db     724 qqlpqsqvqqtqtqtqqqqqqqqqqqqqqqqqqqqqqqqqq 764


RESULT  13
P93109
ID   P93109 standard; protein; 919 AA.
XX
AC   P93109;
XX
DT   19-MAR-1990  (first entry)
XX
DE   Human androgen receptor.
XX
KW   Human androgen receptor; ploYclonal antibody; cancer.
XX
OS   Homo sapiens.
XX
PN   WO8909791-A.
XX
PD   19-OCT-1989.
XX
PF   13-APR-1989;   89WO-US01548.
XX
PR   14-APR-1988;   88US-0182646.
XX
PA   (UYNC-) UNIVERSITY OF NORTH CAROLINA.
XX
PI   French FS,  Wilson EM,  Joseph DR,  Lubahn DB;
XX
DR   WPI; 1989-324206/44.
DR   N-PSDB; N91772.
XX
PT   DNA encoding androgen receptor protein - useful for transforming
PT   eukaryotic hosts for protein expression and subsequent antibody prodn.
XX
PS   Disclosure; Fig. 4; 41pp; English.
XX
CC   Androgen receptor protein (AR) is used to produce mono- or poly-clonal
CC   antibodies.  These are used for the detection and quantification of AR in
CC   the presence of endogenous androgen, as androgen will not interfere with
CC   binding.  They may be used in assays to determine and quantify cellular
CC   distribution of AR in tumour tissue, and are esp. useful for evaluating
CC   prostate cancers to determine responsiveness to androgen withdrawal
CC   therapy.
XX
SQ   Sequence   919 AA;

  Query Match            26.2%;  Score 65;  DB 10;  Length 919;
  Best Local Similarity  48.3%;  Pred. No. 12;
  Matches   14;  Conservative    6;  Mismatches    9;  Indels    0;  Gaps    0;

Qy       2 QEDPQTECQQCQRRCRQQESDPRQQQYCQ 30
           |:  | : || |:: :|||: ||||| |
Db      61 qqqqqqqqqqqqqqqqqqetsprqqqqqq 89


RESULT  14
W14783
ID   W14783 standard; Protein; 919 AA.
XX
AC   W14783;
XX
DT   22-JUN-1997  (first entry)
XX
DE   Androgen receptor.
XX
KW   Androgen receptor; acidic fibroblast growth factor; aFGF;
KW   antisense; benign prostatic hyperplasia; prostate cancer; therapy.
XX
OS   Homo sapiens.
XX
PN   WO9711170-A1.
XX
PD   27-MAR-1997.
XX
PF   20-SEP-1996;   96WO-US15081.
XX
PR   20-SEP-1995;   95US-0004018.
XX
PA   (WORC-) WORCESTER FOUND BIOMEDICAL RES.
XX
PI   Zamecnik PA;
XX
DR   WPI; 1997-202879/18.
DR   N-PSDB; T63407.
XX
PT   Oligonucleotide(s) antisense to human androgen receptor and acidic
PT   FGF genes - used to inhibit gene expression, for the treatment of
PT   benign prostatic hyperplasia
XX
PS   Disclosure; Page 22-28; 51pp; English.
XX
CC   Human androgen receptor (W14783) binds testosterone and, acting
CC   at the transcriptional level, regulates the growth of normal
CC   prostatic cells.  Antisense oligonucleotides (see also T63200,
CC   T63404-05) based on an androgen receptor cDNA clone (see also
CC   T63407) can be used to prevent androgen receptor gene expression,
CC   thereby inhibiting the growth or survival of prostatic cells for
CC   the treatment of benign prostatic hyperplasia and prostate cancer.
XX
SQ   Sequence   919 AA;

  Query Match            26.2%;  Score 65;  DB 18;  Length 919;
  Best Local Similarity  48.3%;  Pred. No. 12;
  Matches   14;  Conservative    6;  Mismatches    9;  Indels    0;  Gaps    0;

Qy       2 QEDPQTECQQCQRRCRQQESDPRQQQYCQ 30
           |:  | : || |:: :|||: ||||| |
Db      61 qqqqqqqqqqqqqqqqqqetsprqqqqqq 89


RESULT  15
Y78914
ID   Y78914 standard; protein; 919 AA.
XX
AC   Y78914;
XX
DT   23-MAY-2000  (first entry)
XX
DE   Human androgen receptor (AR) amino acid sequence.
XX
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KW Androgen receptor; AR; androgen-independent activation; inhibitor;
KW cancer; benign prostatic hyperplasia; hirusutism; androgenic alopecia;
KW acne; breast cancer; Kennedy disease; prostate cancer.
XX
OS Homo sapiens.
XX
PN WO200001813-A2.
XX
PD 13-JAN-2000.
XX
PF 30-JUN-1999; 99WO-CA00604.
XX
PR 30-JUN-1998; 98US-0091871.
XX
PA (UYBR-) UNIV BRITISH COLUMBIA.
XX
PI Sadar MD, Bruchovsky N, Gout PW, Snoek R, Mawji NR;
XX
DR WPI; 2000-182113/16.
XX
PT Novel non-androgen ligand binding peptides for inhibiting
PT androgen-independent activation of androgen receptor, used for
PT screening compounds and for treatment of androgen-mediated diseases
PT such as prostate cancer -
XX
PS Disclosure; Page 7; 32pp; English.
XX
CC This sequence represents the human androgen receptor (AR) amino acid
CC sequence. The invention relates to a fragment of the AR corresponding to
CC amino acids 234-391 (see Y78913). The fragment mediates
CC androgen-independent activation of the AR. The androgen receptor acts as
CC a transcription factor, regulating the expression of certain
CC androgen-responsive genes. Interaction of the AR with the protein kinase
CC A signal transduction pathway involves interaction with the androgen
CC independent region. The AR fragment and peptides derived from it can be
CC used as agents for inhibiting androgen independent activation of the
CC androgen receptor, as activation domains, and as a tool for screening for
CC compounds which affect androgen-independent activation of the AR. The
CC peptides, when used in combination with androgen deprivation, effectively
CC limit androgen mediated disease progression. These diseases include
CC cancer, benign prostatic hyperplasia, hirusutism, androgenic alopecia,
CC acne, breast cancer, Kennedy disease, and especially prostate cancer. The
CC peptides and nucleic acids encoding them, are especially used for the
CC treatment of androgen-mediated diseases, especially prostate tumours in
CC patients deprived of androgen.
XX
SQ Sequence 919 AA;

Query Match 26.2%; Score 65; DB 21; Length 919;
Best Local Similarity 48.3%; Pred. No. 12;
Matches 14; Conservative 6; Mismatches 9; Indels 0; Gaps 0;

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Qy       2 QEDPQTECQQCQRRCRQQESDPRQQQYCQ 30
           |:  | : || |:: :|||: ||||| |
Db      61 qqqqqqqqqqqqqqqqqetsprqqqqqq 89
```

Search completed: March 1, 2001, 15:47:15
Job time: 240 sec